DOCUMENT RESUME

ED 231 216 FL 013 774

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TITLE Ten Years of Immersion in the Ottawa Area.
INSTITUTION Carleton Board of Education. (Ontario).; Ottawa Board of Education (Ontario). Research Centre.
SPONS AGENCY Ontario Dept. of Education, Toronto.
PUB DATE 11 Apr 83
NOTE 29p.; Paper presented at the annual meeting of the American Educational Research Association (Montreal, Quebec, April 11-15, 1983).
AVAILABLE FROM Ottawa Board of Education, 330 Gilmour St., Ottawa, Ontario Canada K2P 0P9 ($3.00).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Academic Achievement; Bilingualism; Communicative Competence (Languages); *Comparative Testing; Elementary Secondary Education; Foreign Countries; *French; *Immersion Programs; *Language Proficiency; Longitudinal Studies; *Program Evaluation; Testing
IDENTIFIERS *Ontario (Ottawa)

ABSTRACT

This overview of research focuses on the characteristics of immersion programs in the Ottawa area. These are primary-entry, late-entry (grade 6 or 7), and secondary level bilingual programs. The following matters are treated: tests and testing conditions; comparisons with Canadian Public Service language requirements; comparisons between groups within the two boards; evaluation of the communicative competence of immersion students in both speaking and writing; and ongoing evaluation of certain cohorts of students. Some of the data discussed are the increasing numbers of English-speaking high school students who are graduating with nearly half their high school credits obtained through courses taught in French; comparisons of students' language proficiency at grade 8 and grade 10; achievement levels reached by late-entry students in grade 12; comparisons using normative data from a test developed for French-speaking students in Quebec and from tests given by the Public Service Commission of the Canadian federal government. Some of the findings from recent investigations have emphasized students' levels of French proficiency; the achievement of immersion students in mathematics and English language skills; and the patterns of retention and transfer in these programs. (Author/AMH)

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TEN YEARS OF IMMERSION IN THE OTTAWA AREA

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The research projects referred to herein were funded under contracts between the Ministry of Education, Ontario and the Ottawa and Carleton Boards of Education.

FL 013 774

Presented as part of a symposium on second-language learning
at the annual meeting of
the American Educational Research Association
in Montreal, Quebec, on April 11, 1983

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INTRODUCTION

Since the establishment of an immersion program in St. Lambert some 15 years ago, such programs have spread across Cannada. That pioneer program, well researched by Dr. Wallace Lambert of McGill University and his colleagues, has been the model for many of the more than 150 immersion programs in Canada[1]; over half of them start in kindergarten and about another one-fourth in grade 1. These programs are generally classified as early French immersion (EFI) or as primary-entry immersion. Most of the rest (14 per cent) began the program in grade 6, 7, or 8; these are called late-entry immersion (LFI). In a few cases immersion programs involving a language other than French will be found in Canadian schools; the Edmonton Public School Board, for example, has an active second language program with immersion classes in Ukrainian, German, Cree, and Hebrew, as well as French. And in at least one instance, in Montreal, there has been a trilingual program in French and Hebrew for English-speaking children.

In Ontario many immersion programs began about 1970, most of them based on the St. Lambert model. If immersion programs are defined as those where half or more of the instruction is given in the second language, there were more than 28 000 students enrolled in such programs at the elementary school level (K-8) in Ontario in 1978-79[2].

1. "French immersion programs in Canada", Canadian Modern Language Review, 32: 597-605, 1976.

2. M. Swain and S. Lapkin. Bilingual Education in Ontario: A Decade of Research. Toronto, Ministry of Education, 1981.

In Ottawa, where many government employees are in positions where a certain level of bilingualism is a job requirement, there was strong parental pressure for the introduction of immersion programs in all four of the local school boards. At least one type of immersion program was soon to be found in each board, and the number of students involved increased each year during the seventies. About a third of the five-year-old kindergarten students are enrolled in a French immersion program in the two public school boards, and a required program of 50 per cent English and 50 per cent French has been in effect for several years in the first five grades of one of the Roman Catholic (or separate) school boards.

Ottawa also has two universities, both with strong programs in the teaching of second languages and with several departments involved in research on second language learning. Research in the Ottawa area has also been carried out through the Bilingual Education Project of the Ontario Institute for Studies in Education (OISE). Some of this work has been funded through contracts with the Ontario Ministry of Education, as has been the case for the work done in the two public school boards by the Research Centre of the Ottawa Board of Education and by other researchers in the two separate school boards. The federal Secretary of State, through its Language Programs Branch, has also supported bilingual education in a variety of ways.

The immersion programs found in Ontario and in other parts of Canada share certain common characteristics. The programs are in most cases optional and serve a primarily English-speaking population; students in immersion programs are exposed to the same curriculum in content subjects as those in the regular English program. The pattern

for the use of French varies, but typically in the initial years of the program from 75 to 100 per cent of the time French is the medium of instruction. In later years the time spent in French is usually reduced to about 50 per cent.

In Canada there are also many systems in which large numbers of children are introduced to English through another type of immersion program which could be classified as transitional bilingual education. As in similar programs in the United States, instruction begins in the child's first language and moves gradually to full-time instruction in English. It is important to note that the French immersion programs described in this symposium serve English-speaking students in all parts of Canada by giving them access to French, one of Canada's two official languages. This is the language of the majority in the province of Quebec and of a minority of varying proportions in the other provinces.

RESEARCH IN THE OTTAWA AREA

Since the initiation of the first French immersion programs in Canada in the mid sixties, numerous studies have been carried out by researchers in universities and school systems. The studies carried out by the Ottawa Board Research Centre have tended to be limited to practical rather than theoretical issues.

One of the early concerns was whether there was any lag in or detriment to the English language development or general academic skills of immersion students. The research carried out in Ottawa by OISE and by the Research Centre have replicated the findings of a number of other studies. These have indicated that although there may be temporary delays in the development of some English language skills until formal English instruction is introduced, the immersion groups catch up and by grade 4 or 5 they perform as well as or even better than their English program counterparts on various tests of English language and academic achievement. The same issue has been explored at the grade 8 level for both primary- and late- entry students.

Other studies indicate the immersion groups tend to perform better than students in the regular English program groups. In most of the studies correction is made for differences in academic ability, since the immersion students tend to be somewhat more able academically on the average than the total group of English program students. The current contract of the Research Centre with the Ministry of Education includes an attempt to explore this matter further at the high school level, by comparing the achievement in selected content subjects of students taught in English and in French.

In the earlier years of the Research Centre's evaluations, various attitude measures were used with students at different grade levels to help determine whether the attitudes of immersion students toward francophones differ from those of non-immersion students. The measures were not sensitive enough to measure differences between the two groups, both of which showed generally positive attitudes, or to detect changes over time. There was also some negative feedback from parents with respect to the use of these questionnaires and this particular avenue was not explored further.

In recent years the Research Centre evaluations have emphasized the French proficiency of students enrolled in the immersion programs, both primary- and late-entry. Many of these have involved grades 8 through 12 in both longitudinal and cross-sectional studies.

The annual reports prepared for the Ministry of Education each year give details of the investigations carried out under contract, while other reports have been made of studies funded by the Ottawa Board. A list of reports of studies involving immersion which have been published since 1979 is given at the end of this report. Copies of these reports cn be ordered from the Research Centre of the Ottawa Board of Education. Only a few examples of procedures, problems and results are discussed in this paper.

IMMERSION PROGRAMS IN OTTAWA AND CARLETON

An outline of the characteristics of the immersion programs in the Ottawa and Carleton Boards of Education is given below:

Primary-entry:

- Begins in kindergarten
- All instruction in French in kindergarten and grade 1
- About 60 minutes daily in English, starting in grade 2
- Gradual increase in English instruction to 50% by grade 6

Late-entry:

- Ottawa begins in grade 6 with 100% French, followed by 50% in grades 7 and 8
- Carleton begins in grade 7 with 80% French, followed by 80% in grade 8

Secondary-level bilingual programs:

- 2 to 4 courses (out of 8) in French each year, in grades 9 through 12
- French language and literature at each grade level
- options available and amount of choice varies with school

Table 1 shows the approximate number of hours of French instruction accumulated by the end of each grades from 9 to 12 for students in immersion programs in the two boards involved in these studies.

TABLE 1

CUMULATIVE HOURS IN FRENCH FOR VARIOUS IMMERSION GROUPS, OTTAWA AND CARLETON, 1982

Grade	Primary-entry		Late-entry	
	Ottawa	Carleton	Ottawa	Carleton
9	6030	5780	2970	2180
10	6480	6160	3420	2450
11	6900	6360	3490*	2720
12	--	--	3940*	2990

* These students had taken a 20-minute core French program prior to entry into the immersion program, whereas later groups had a 40-minute core program.

TESTS AND TESTING CONDITIONS

During the ten years of these evaluation studies, many different instruments have been administered to students in immersion programs. The problem of obtaining tests suitable for immersion students at various levels has been a perennial one; in many cases the choices made through necessity have not been ideal. Table 2 shows the instruments used in grades 8 through 12 from 1979 to 1982. The number of students in each program who were tested at each grade level is shown in Table 3; all bilingual classes at these grade levels were tested. Speaking tests have been included as frequently as possible, in spite of the costs involved and the time required.

In most cases tests have been used with one or more groups for a number of years to provide both longitudinal and cross-sectional data, as well as to examine differences between groups. The series of French tests developed for the International Educational Achievement (IEA) studies have been used for these purposes; at least one of these has been administered at some grade levels each year. One of the forms of a cloze-type test constructed by OISE, requiring the student to fill in words missing from a text, has also provided a means of making comparisons between groups.

In attempting to collect test data, one problem is to ensure that conditions are the same for all classes taking the tests. In most cases testers specially trained for the tasks have administered the tests, and arrangements are made to provide suitable equipment and to set up an appropriate schedule.

TABLE 2

IMMERSION GROUPS - INSTRUMENTS USED

Year	Grades	Instrument
1982	8	Test de français, Secondaire I
	9	Test de français, Secondaire III
	10-12	Test de français, Secondaire IV
	10	Writing (letter re change in school calendar)
	10	Language Knowledge Examination (PSC)
	8,10	French Speaking Test - Structures
	12	French Interview Test (FSI)
	9,11	IEA IVS French Listening Comprehension
	12	Questionnaire on plans
	Graduates	Follow-up questionnaire
1981	10	IEA IVS French Listening Comprehension
	10	IEA IVS French Reading
	10	IEA IV French Writing
	10,12	Test de mots à trouver (cloze), Niveau C
	10,12	Test de français, Secondaire IV (part III)
	10	Test de français, Secondaire I
	12	Questionnaire on plans
	12	Language Knowledge Examination (PSC)
	11	French Interview Test (FSI)
1980	10	IEA IVS French Listening Comprehension
	8,10,12	IEA IVS French Reading
	10,12	IEA IV French Writing
	8,10,12	Test de mots à trouver (cloze), Niveau D
	8,10	Test de français, Secondaire I
	12	Test de français, Secondaire IV (part III)
	8	Composition française
	8	French Interview Test (FSI)
	8	Differential Aptitude Test (VR,NA, AR)
	8	Canadian Test of Basic Skills (Lang., Math.)
	8	Gates-MacGinitie Reading Test
	8	English Cloze Test
	8	English Composition
1979	12	IEA IVS French Listening Comprehension
	12	Test de mots à trouver (cloze) Niveau D
	12	Ottawa Epreuve de français 12A
	12	Language Knowledge Examination (PSC)
	12	Henmon-Nelson Test of Mental Ability
	8	OISE Test de compréhension auditive
	8	OISE Test de compréhension de l'écrit
	8	OISE Test de mots à trouver (cloze) Niveau D
	8	Test de français, Secondaire I
	8	Composition française
	8	Canadian Cognitive Abilities Test

TABLE 3

BILINGUAL-PROGRAM GROUPS TESTED, OTTAWA AND CARLETON, SPRING 1982

Group*		Number of Students in program	Number of Students used for analysis	Number of Classes	Number of Schools
Grade 8:	Primary-entry, Ottawa	179	130	9	7
	Late-entry, Ottawa	124	76	5	5
	Primary-entry, Carleton	274	215	12	6
	Late-entry, Carleton	284	165	11	6
Grade 9:	Primary-entry, Ottawa)	245#	105)	12#	3
	Late-entry, Ottawa)		33)		3
	Primary-entry, Carleton	124	82	6	2
	Late-entry, Carleton	195	88	7	3
Grade 10:	Primary-entry, Ottawa)	223#	79)	11#	3
	Late-entry, Ottawa)		45)		3
	Primary-entry, Carleton	68	22	3	2
	Late-entry Carleton	101	66	4	3
Grade 11:	Primary-entry, Ottawa)	176#	20)	8#	3
	Late-entry, Ottawa)		47)		3
	Primary-entry, Carleton	69	36	3	2
	Late-entry, Carleton	91	61	4	3
Grade 12:	Late-entry, Ottawa	163	43	6	3
	Late-entry, Carleton	91	32	3	3

* Students were usually included in the primary-entry analysis group if they had been in the program since grade 4 or earlier, while the late-entry analysis groups included those students who had experienced the full Ottawa or Carleton program. In all cases, an additional criterion for inclusion in a high school analysis group was enrolment in the appropriate French language course.

Students from primary- and late-entry immersion were mixed in most of these classes, along with students with other varying backgrounds.

Despite these efforts, however, some episodes which indicate lack of equivalence of testing conditions have come to our attention, and there may be others about which we have no knowledge. Some of the difficulties are magnified in the case of listening tests, for which tape recordings are generally used. For one test given in the past year, for example, it was found that when a certain model of recorder was used at the high volume necessary for large classroom conditions, there was excessive sound distortion, which had not been apparent when the tapes and tape recorders were tested prior to their use. In some schools the tester was able to obtain more satisfactory machines, but the results obtained from these schools could not then be compared to those from the schools tested earlier. In another case the results from one class had to be excluded from the analysis because a loud pneumatic drill outside the school obscured the voices on the tape and the teacher had to read the test to the class.

COMPARISONS WITH OTHER GROUPS

There has always been much interest among parents and teachers in the Ottawa area in comparing the performance of immersion students with that of adults in the Canadian federal public service who take a test for classifications as to their level of bilingualism. For a few groups of students in bilingual high school programs it has been possible to arrange for them to take the Public Service Commission's Language Knowledge tests, which are used with applicants for government positions requiring varying degrees of facility in French.

Although before 1982 students at various different grade levels in the high school bilingual programs had taken the Public Service Commission tests, none of these students had been in the primary-entry stream. However, in the spring of the 1981-82 school year it was possible to test a group of grade 10 bilingual program students in Ottawa who had followed a primary-entry immersion program in the elementary grades.

The four skills of reading, writing, listening and speaking were tested. The grade 10 primary-entry students and several groups of late-entry students at grades 10 and 12 have, on average, achieved Level B on reading, writing and listening, and the lower Level A for speaking. Level B, the highest level attainable on these particular tests, would be required for most positions demanding bilingual competence, while the lower level would be sufficient for some clerical and technical positions. It is possible to achieve a higher level (C) through the use of another test which uses individual interview procedures, but it is not known how many of the bilingual program students could have reached this level.

Table 4 shows the proportion of grade 10 students who were classified at the A and B levels of linguistic competence for each of the four skills; the classification X denotes scores which are below the minimum for Level A. The table also shows the results obtained in 1981 for grade 12 students who had begun late immersion in grade 6 or 7.

Over 80 per cent of the students at both grade levels who were tested in 1981 and 1982 reached the B level on the tests of listening and writing, the latter being a test emphasizing grammar and usage. The proportion classified at the B level was about 60 per cent for

grade 10 EFI in Ottawa and 70 per cent for a combined grade 12 LFI group from the two boards involved. On the speaking test, 38 per cent of the same grade 10 EFI students and 20 per cent of those in grade 12 reached the B level.

TABLE 4

PROPORTION OF STUDENTS IN EACH LEVEL OF BILINGUALISM ON LKE 400B TESTS, GRADES 10 AND 12, 1981 AND 1982

Grade and group (EFI = Primary-entry) (LFI = Late-entry)	Per cent reaching given level of bilingualism			Number of students
	B	A	X	
Reading				
Gr. 10 (1982) Ottawa EFI	58	38	4	48
Gr. 12 (1982) Ottawa/Carleton LFI	72	25	3	53
Listening				
Gr. 10 (1982) Ottawa EFI	85	15	0	48
Gr. 12 (1981) Ottawa/Carleton LFI	87	13	0	53
Writing				
Gr. 10 (1982) Ottawa EFI	83	17	0	48
Gr. 12 (1981) Ottawa/Carleton LFI	83	15	2	53
Speaking				
Gr. 10 (1982) Ottawa EFI	38	44	18	48
Gr. 18 (1981) Ottawa/Carleton LFI	20	72	8	53

Table 5 shows that the mean scores of the grade 10 primary-entry students and also those in the grade 12 late-entry group were at a B level of linguistic competence for all except the speaking test, on which the average student reached the A level. There were no significant differences between the mean scores of the two groups.

For a group of 45 students who had scores on both the Public Service Commission Reading Test and the Test de français, Secondaire IV, the correlation between the two sets of scores was obtained. This is one of a series of tests developed within the Quebec school system to measure reading comprehension and language usage. The correlation of 0.45 is significant, but the two tests apparently measure somewhat different skills, since only about 20 per cent of the variance was shared.

TABLE 5

PUBLIC SERVICE COMMISSION LKE 4008 TESTS,
GRADES 10 AND 12, OTTAWA, 1981 AND 1982

Group	Reading		Writing		Listening		Speaking		N
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	
Primary-entry, Grade 10, 1982	22.6*	4.2	14.9*	2.4	30.7*	2.3	44.0#	12.3	48
Late-entry, Grade 12, 1981	24.0*	3.5	16.3*	3.8	30.8*	2.6	43.3#	9.9	36

* Mean classified at B level of linguistic competence on PSC scale.

\# Mean classified at A level of linguistic competence on PSC scale.

It has also been of interest to discover how well the various groups of immersion students perform relative to native speakers of the language. To this end one or more of the levels of the Test de français were administered to bilingual-program students in grades 8 through 12. The average score of the grade 8 primary-entry students was at about the 60th percentile and that of the late-entry students at about the 40th percentile when compared with norms based on the first-year secondary students on whom the test was normed.

COMPARISONS BETWEEN GROUPS WITHIN THE TWO BOARDS

When the equated scores for the groups of early- and late-entry immersion students in the two boards were compared, it was found that the primary-entry students consistently do better than those in late-entry programs at the same grade level. In most of the cases shown in Table 6 the difference between groups in the two programs in the same board were significant. There was also an increase in the mean score from grade to grade in each of the four groups; in about half of these cases the differences were also significant.

TABLE 6

TEST DE FRANCAIS SCORES CONVERTED TO SECONDAIRE III, GRADES 8 TO 12, OTTAWA AND CARLETON, SPRING 1982

Grade and group		Français III (max. 35)		
		Mean	SD	N
Gr. 8	OBE EFI	18.9*	4.3	128
	OBE LFI	17.1	4.3	76
	CBE EFI	18.8*	4.9	146
	CBE LFI	16.2	4.3	117
Gr. 9	OBE EFI	21.2*	4.9	105
	OBE LFI	20.2*	4.0	33
	CBE EFI	22.4*	4.9	82
	CBE LFI	20.5*	4.1	88
Gr. 10	OBE EFI	23.7	5.9	79
	OBE LFI	23.0	5.6	45
	CBE EFI	25.6	4.1	22
	CBE LFI	23.4	4.2	66
Gr. 11	OBE EFI	27.3	10.1	20
	OBE LFI	24.5	7.1	47
	CBE EFI	30.0	8.3	35
	CBE LFI	24.8	6.4	55
Gr. 12	OBE LFI	26.3	6.6	43
	CBE LFI	27.8	9.3	32

* These were obtained scores, not converted ones.

For a sizeable group at each grade level tested, scores on the Test de français were available from the end of their grade 8 year. For grades 9 to 12 the mean scores from both years were converted to equivalent scores in order to make possible comparisons from year to year. The results are shown in Table 7.

TABLE 7

GAIN SCORES SINCE GRADE 8 IN EQUIVALENT OF FRANCAIS III, OTTAWA AND CARLETON, SPRING 1982

1981-82 Grade and group		Grade 8 Mean	Grade 8 N	Spr. 1982 Mean	Spr. 1982 N	Gain
Gr. 9	OBE EFI	20.9	90	21.2	90	0.3
	OBE LFI	18.8	32	20.2	32	1.4
Gr. 10	OBE EFI	19.9	68	23.4	68	3.5
	OBE LFI	18.1	40	22.6	40	4.5
	CBE EFI	23.1	20	26.1	20	3.0
	CBE LFI	17.2	57	22.8	57	5.6
Gr. 11	OBE EFI	20.5	20	27.4	20	6.9
	OBE LFI	15.8	39	24.4	39	8.6
	CBE EFI	25.1	32	29.2	32	4.1
	CBE LFI	15.9	57	24.8	57	8.9
Gr. 12	OBE LFI	21.6	39	26.4	39	4.8
	CBE LFI	24.0	30	27.3	30	3.3

One example of the use of the IEA tests to measure growth was made possible when the same test of writing skills was used with students in grade 8 and again in grade 10. Results are shown in Table 8 for three groups of students present for both tests; each of the groups made significant gains during the two-year period. Moreover, there appears to be a tendency for the differences between groups to be decreasing.

TABLE 8

IEA IV FRENCH WRITING: THREE BILINGUAL-PROGRAM GROUPS, GRADES 8 AND 10, OTTAWA AND CARLETON, SPRING 1978 AND 1980

Group	Grade 8			Grade 10		
	Mean	SD	N	Mean	SD	N
Grade 7 entry, Ottawa	18.8	8.4	19	26.6#	8.9	19
Grade 7 entry, Carleton	22.9	7.1	19	28.1#	6.2	58
Grade 6 entry, Ottawa	19.7	6.2	45	26.8#	5.0	45

Grade 10 mean is significantly greater than that for grade 8 ($p < 0.05$)

Although high school results for late-entry immersion students had been available for several years, it is only in the last two or three years that it has been possible in Ottawa and Carleton to compare the results for primary-and late-entry groups at the high school level and to begin to investigate the question of whether there is an optimal age to begin a French immersion program. However, it should be remembered that, even if the groups appear to be similar in ability, other factors such as motivation may differ.

In 1979 and 1980 extensive testing of all grade 8 students in either primary- or late-entry immersion in both boards was carried out. Various measures of French proficiency in the four skills of reading, writing, listening and speaking were used. On nearly all of these measures the primary-entry groups had significantly higher scores than the late-entry groups ($p < 0.05$), even after adjustment for ability. This was to be expected, since the latter groups had received less than half of the time in French instruction.

In 1981 and 1982, it was possible to compare the results for primary- and late-entry immersion students at the grade 10 level. In 1981 the first sizeable groups of primary-entry immersion students had significantly higher scores than the late entry ones on five different tests, consisting of three from the IEA series, the Test de francais, and a cloze-type test. In the following year there were fewer significant differences between the two groups, although it is possible that in some cases this was a function of the lack of sensitivity in the scoring procedures used with the communicative tasks, and in the case of the interview test, of the size of the sample as well. There were no significant differences between groups on the same test of French reading and language usage that had been given in the previous year. When the two groups were compared on the writing task, the only significant difference was on the rating for word choice, where the combined primary-entry group for the two boards had a higher mean rating than the corresponding late-entry group. When the distributions of errors were examined, they were found to be very similar for the two program groups, as was the percentage of errors.

Results on two levels of the cloze test (Test de mots à trouver) given at different grade levels in various years suggest about a two-year difference at the secondary level between late-entry groups and the first group of primary-entry students, but this difference appears to have diminished with the second group of primary-entry students. Table 9 gives results on the cloze test for the four grade 10 and two grade 12 groups tested in the spring of 1981. Both of the grade 12 late-entry groups have mean scores similar to those of the grade 10

primary level groups. This two-year difference was also suggested when the grade 8 primary-entry results of 1979 and 1980 were compared to the grade 10 late-entry scores of 1980. It is important to note, however, that in every measure individual differences among students in any one program group far surpassed any overall difference between programs.

TABLE 9

TEST DE MOTS A TROUVER, NIVEAU C: PRIMARY- AND LATE-ENTRY, GRADES 10 AND 12, OTTAWA AND CARLETON, SPRING 1981

Grade	Group		Mean	SD	N
Grade 10	Ottawa	Primary-entry	33.4#	5.2	33
	Carleton	Primary-entry	34.7#	3.7	43
	Ottawa	Grade 6 entry	29.7	4.6	61
	Carleton	Grade 7 entry	31.0	4.7	61
Grade 12	Ottawa	Grade 6 entry	33.5*	3.9	31
	Carleton	Grade 7 entry	33.4	6.0	18

* Mean of this group significantly greater than that of the grade 10 late-entry group in the same board ($p < 0.05$)

Mean of this group significantly greater than that of the grade 10 late-entry group in the same board ($p < 0.05$)

COMMUNICATIVE COMPETENCE

An effort has been made in the past several years to evaluate the communicative competence of immersion students in both speaking and writing. The writing task given to grade 10 students in 1982 consisted of a letter in French on a topic thought likely to evoke strong opinions on the part of most students. A rating of from 1 to 5 was given as a holistic score for over-all impression and for each of five analytic scores (word choice, technical skills, grammatical skills, content and ideas, and organization). A single scorer was used for this initial experimental procedure, and various checks of intra-scorer reliability were built into the procedures. In addition, an error analysis was carried out by a francophone with an excellent knowledge of both French and English. The errors were classified under a number of linguistic as well as general categories; in addition, any error which would be identified as being caused by the influence of English was categorized separately as an anglicism. Further refinements of the classification system would be desirable, as would be an analysis of the structures and vocabulary used correctly by the students.

One problem occurred in spite of the training and careful instructions given to the scorer. In all of the groups the distributions were skewed, with greater proportions of high scores than low ones. However, the scoring was found to be consistent and hence it was possible to use the ratings to compare groups.

Table 10 shows the distribution of the holistic ratings for the groups of primary- and late-entry students in the two boards, while Table 11 summarizes the distribution of errors in the various categories of linguistic elements for these groups. In the original report

will be found details concerning the frequency of occurrence of subcategories of errors used for linguistic elements, anglicisms, and other types of error.

TABLE 10

FRENCH WRITING: HOLISTIC RATING, GRADE 10, OTTAWA AND CARLETON, SPRING 1982

Rating	Ottawa				Carleton				Combined			
	Primary		Late		Primary		Late		Primary		Late	
	N	%	N	%	N	%	N	%	N	%	N	%
1	2	3	1	2	1	4	3	4	3	3	4	4
2	8	11	6	13	5	22	14	21	13	13	20	18
3	21	28	9	20	6	26	22	32	27	28	31	27
4	19	26	16	36	6	26	16	24	25	26	32	28
5	24	32	13	29	5	22	13	19	29	30	26	23
Mean	3.7		3.8		3.4		3.3		3.7		3.5	
SD	1.1		1.1		1.2		1.1		1.1		1.1	
N	74		45		23		68		97		113	

TABLE 11

FRENCH WRITING: LINGUISTIC ERROR ANALYSIS, GRADE 10, OTTAWA AND CARLETON, SPRING 1982

Category*	Per cent of total number of errors			
	Ottawa		Carleton	
	Primary	Late	Primary	Late
Verbs	21.0	20.3	18.3	20.5
Prepositions	8.9	9.2	8.2	9.1
Adjectives	8.6	8.4	9.9	10.2
Articles	7.9	7.1	9.2	9.0
Nouns	6.3	5.1	7.3	4.4
Pronouns	5.9	5.3	5.6	5.1
Conjunctions	1.3	1.4	1.7	1.2
Adverbs	1.2	1.1	1.1	0.9
Negations	1.1	1.3	1.0	0.9
TOTAL	62.2	59.2	62.3	61.3

* The frequency of occurrences for subcategories of each type of linguistic error may be found in the Ninth Annual Report of the project.

A half-hour French interview test, similar to that used by the Foreign Service Institute in the United States, has been used with samples of primary- and late-entry students at several grade levels. The scoring system uses a rating of 1 to 5 for the candidate's overall competence in speaking French, with the possibility of modifying these ratings by a plus (+) to indicate a proficiency which substantially exceeds the minimum requirements for the level but falls short of the next higher level. Although eleven different ratings were possible, only one student was given one of the top three scores, representing native-like speech, and the two lowest ratings were not used. Thus, for this population, the scale was effectively one of six points.

The verbal descriptions associated with these ratings indicate that the oral competence of the majority of the immersion students tested may be considered to be able at least to satisfy their routine social needs and limited work needs in French (Level 2 or 2+). Many are also able to speak the language well enough to participate in most ordinary conversations on practical, social or work-related subjects (Level 3 or 3+). The tapes made for the grade 12 late-entry immersion students were also used for an error analysis similar to that applied to the writing samples mentioned previously.

Table 12 gives the verbal descriptions used in Levels 1 to 3 of the interview test, as provided by the Foreign Service Institute. Over half of the 97 students who had been in either primary-entry or late-entry programs and who were tested at the beginning of grade 11 in the fall of 1981 were classified at Level 2 or 2+. Another 20 per cent were placed in the next higher category (3 or 3+), while about 20 per cent were judged to be below Level 2. Only 5 students, all but one

from late-entry programs, were classified as performing at the very basic Level 1, while 16 were at Level 1+ or close to Level 2.

TABLE 12

COMPETENCY LEVELS USED WITH FRENCH INTERVIEW TEST, SPRING 1982

Level 1

Can satisfy routine travel requirements and minimum standards of courtesy. Can ask questions and respond on very familiar subjects; with limited experience in the language can understand simple questions or statements if the speaker uses slow, clear speech, repetition and paraphrase; vocabulary inadequate for expressing other than the most basic needs; frequent errors of pronunciation and grammar but may be understood by a native of the language who is accustomed to dealing with foreigners to his language. Although basic requirements differ considerably between individuals, persons achieving Level 1 can order a simple meal, ask for shelter or lodging, ask for and receive simple road directions, do shopping and tell time.

Level 2

Can satisfy routine social and limited professional needs. Can express what is wished with assurance, but not without some difficulty, in most social situations comprising introductions and familiar conversations on most matters of current interest as well as work, family and autobiographical details; can speak with assistance of limited professional needs; can infer the essentials from most nontechnical conversations; fluent vocabulary, sufficient for roundabout expression; an accent which though intelligible contains errors; can usually handle elementary constructions with accuracy but lacks assurance in many aspects of grammar.

Level 3

Can speak the language with sufficient lexical and structural control to participate in most ordinary or official conversations on practical, social or professional subjects. Can discuss particular interests or special areas of competence with reasonable ease, shows comprehension for a normal rate of conversation; vocabulary is extended enough that the candidate is rarely at a loss for words; accent could seem entirely foreign; good use of grammar; errors never obscure meaning and rarely disturb the native speaker.

TRACING AND OTHER STUDIES

Another important aspect of the Ottawa research has been the ongoing tracing of certain cohorts of students throughout their school careers. This has made it possible to compare program choices, to examine program retention rates, and to ensure that the backgrounds of students included in analysis groups has been representative of those immersion kindergarten in 1971 and who remained in the Ottawa-Carleton area, about two thirds were still in a program emphasizing French by grade 8. Close to 70 per cent of the primary-entry group and over half of the late-entry students appear to be continuing into a bilingual progam at the grade 9 level. In 1982 questionnaires were sent to two groups of former late-entry students who had graduated from grade 12 in a bilingual high school program. At least 80 per cent of the students were taking or planning to take a post-secondary program, and most felt fairly confident in their ability to use French. Two out of three described experiences since leaving school which had given them opportunities to use and improve their French.

It is hoped that it will be possible to monitor the progress of the primary-entry immersion students until several cohorts have completed grade 12, and to continue the follow-up of graduates. It will also be important to continue to examine the progress of children in the earlier grades and to study in particular ways of helping those who have problems, both those who transfer out of immersion and those who remain. Additional projects, some with a more theoretical emphasis, can continue to stimulate program developers to provide the best conditions possible for learning French as a second language in the special environment in the Ottawa-Carleton area.

Selected Research Reports on French Immersion from the Research Centre

REPORTS TO THE MINISTRY OF EDUCATION AND RELATED WORKING PAPERS

Sixth Annual Report (1979): French Proficiency: Status of Ottawa and Carleton Students in Alternative Programs.

Seventh Annual Report (1980): French Proficiency and General Progress: Students in elementary core French programs, 1973-1980, and in immersion and in bilingual programs, grades 8, 10 and 12, 1980.

Eighth Annual Report (1981): Longitudinal and Cross-sectional Studies of French Proficiency in Ottawa and Carleton Schools.

Ninth Annual Report (1982): After Immersion: Ottawa and Carleton Students at the Secondary and Post-secondary Level.

1979 Working Papers

W.P. 128 An examination of two cohorts of students who have transferred.

W.P. 129 French proficiency of graduates of high school bilingual programs.

W.P. 131 French proficiency of grade 8 primary- and late-entry immersion students: Ottawa and Carleton Boards, Spring 1979.

W.P. 132 Reasons for transfer from immersion and bilingual programs, grades 8 and 12.

1980 Working Papers

W.P. 134 French proficiency in high school bilingual programs.

W.P. 135 French proficiency and general achievement of grade 8 students in primary- and late-entry immersion.

W.P. 135a French proficiency and general achievement of grade 8 primary- and late-entry immersion students and general achievement of comparison students in the regular English program, with results adjusted for ability.

W.P. 136 Tracing studies.

1981 Working Papers

W.P. 137 Immersion students enter high school (tracing).

W.P. 141 Late and early immersion in grade 10 (French proficiency).

W.P. 142 Late immersion at grade 12 (French proficiency).

W.P. 143 Attitudes towards their program and plans for the future of grade 12 bilingual-program students.

1982 Working Papers (in preparation)

W.P. 146 Grade 12 student survey: year two.

W.P. 147 The Ottawa bilingual high school program: views of two groups of graduates.

W.P. 148 Test de français, grades 8 to 12, bilingual-program groups, Ottawa and Carleton, spring 1982.

W.P. 149 French writing, grade 10 primary- and late-entry groups, Ottawa and Carleton, spring 1982.

W.P. 150 French speaking test (structures), grades 8 and 10 bilingual-program groups, Ottawa and Carleton, spring 1982.

W.P. 151 French interview test, grade 12 late-entry immersion, Ottawa and Carleton, spring 1982.

W.P. 152 French listening comprehension, primary- and late-entry groups, Ottawa and Carleton, spring 1982.

RESEARCH REPORTS OF THE OTTAWA BOARD OF EDUCATION

R.R. 79-01 M. Parkin: But do they speak French? A comparison of French immersion programs in immersion only and English/immersion settings.

R.R. 80-08 P. Wightman: The French immersion student in Europe. An informal report of the experiences of several young Canadians.

R.R. 81-07 M. Parkin: The relevance of interlanguage and pidginization to French immersion schooling.

R.R. 81-12 G. MacNab: French immersion programs across Canada: the influence of cumulative amounts of time, starting age and yearly allotment on the learning of French.

R.R. 82-09 R. Bonyun: Does a late immersion program make a difference to the graduates?

Reports may be ordered from the Research Centre, Ottawa Board of Education, 330 Gilmour Street, Ottawa, Ontario, K2P 0P9, at $3 to $5 each.